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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/468,639

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TOYOSHI KAWADA

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EXAMINER

LIANG, REGINA

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/468,639

Applicant(s)

KAWADA ET AL.

Examiner

Regina Liang

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28, 31-33 and 38-53 is/are pending in the application.
- 4a) Of the above claim(s) 31-33 and 38-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-47 and 50-53 is/are rejected.
- 7) ☒ Claim(s) 48, 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of specie II in the reply filed on 11/13/07 is acknowledged. The traversal is on the ground(s) that claim 44 is generic. This is not found to be persuasive because claim 44 is not generic to all species. Claim 44 read on at least one of Figs. 4B and 5B of species II. Claim 44 also read on at least one of Figs. 6B and 7B, thus, claim 44 is generic to specie of Figs. 6B and 7B only. Claims 44-53 are examined.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 44-47, 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseki (US 6,483,487) in view of Kanazawa et al (US 5,654,728 hereinafter Kanazawa).

As to claim 44, Iseki discloses a driving device of a plasma display panel (Fig. 14) having a plurality of first and second electrodes (Sc, Su) spaced apart from one another to form pairs and a plurality of cells (1) formed between the first and second electrodes, and displaying according to the plural cells by applying drive voltages to said first and second electrodes, comprising:

a first power supply having negative polarity (-1/2Vs, Fig. 1); a second power supply having positive polarity (+1/2Vs, Fig. 1); a scan driver (4) connected to the plural first electrodes

respectively (Sc); and a second electrode common driver (5) connected to the plural second electrodes commonly (Su);

wherein at a first timing for lightening the plural cells, drive current flows through a connection route of the second power supply, the first electrode common driver, the scan driver, the first electrode, the cell, the second electrode, the second electrode common driver and the first power supply (see col. 8, lines 31-39 for example), and at a second timing for lightening the plural cells, drive current flows through a connection route of the second power supply, the second electrode common driver, the second electrode, the cell, the first electrode, the scan driver, the first electrode common driver and the first power supply (col. 8, lines 57-63 for example).

Iseki does not explicitly disclose the scan driver having a first electrode common driver. However, Kanazawa is cited to teach a driving device of a plasma display similar to Iseki. Kanazawa teaches the Y electrodes (first electrode) driver including a Y common driver (24) and a scan driver (2521, see Fig. 1), the power supplies (Vs) are generated in the Y common driver. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the scan driver (4) of Iseki including a first electrode common driver and a scan driver as taught by Kanazawa so as to provide a drive circuit for a plasma display with simpler structures to achieve higher integration of the drive circuit and a reduction in the production costs (col. 3, lines 62-65 of Kanazawa).

As to claim 45, Fig. 2 of Iseki teaches the driving operations at the first timing and the second timing are performed alternately, and at transitions between the first and second timings, a connection route of the first power supply, the first electrode common driver, the scan driver,

the first electrode, the cell, the second electrode, the second electrode common driver and the first power supply is formed so that the first power supply having negative polarity is commonly applied to the first and second electrodes (from $-1/2V_s$ to $+1/2V_s$, see Fig. 2A).

As to claim 46, Fig. 2 of Iseki teaches the driving operations at the first timing and the second timing are performed alternately, and at transitions between the first and second timings, a connection route of the second power supply, the first electrode common driver, the scan driver, the first electrode, the cell, the second electrode, the second electrode common driver and second power supply so that the second power supply having positive polarity is commonly applied to the first and second electrodes (from $+1/2V_s$ to $-1/2V_s$, Fig. 2A).

As to claim 47, Iseki teaches a third power supply (ground voltage as shown in Fig. 2) having potential between the first and second power supplies, wherein driving operations at the first timing and the second timing are performed alternately, and at transitions between the first and second timings, a connection route of the third power supply, the first electrode common driver, the scan driver, the first electrode, the cell, the second electrode, the second electrode common driver and the third power supply is formed so that the third power supply is commonly applied to the first and second electrodes.

As to claim 50, Fig. 14 of Iseki teaches a plurality of third electrodes (D1-Dn) crossing the plural first and second electrodes; and an address driver (6) connected to the plural third electrodes respectively, wherein said address driver applies a ground potential to the plural third electrodes and maintains the plural third electrodes at the ground potential during the first and second timings (see Fig. 2E).

As to claim 51, Fig. 1 of Kanazawa teaches a large capacitance condenser (C2) is connected between terminals of the first power supply and the second power supply.

As to claim 52, Fig. 14 of Iseki teaches a plurality of third electrodes (D1-Dn) crossing the plural first and second electrodes and an address driver (6) connected to the plural third electrodes respectively, wherein the address driver applies a ground potential to the plural third electrodes and maintains the plural third electrodes at the ground potential during the first and second timings (see Fig. 2E).

As to claims 53, Fig. 1 of Kanazawa teaches a large capacitance condenser (C2) is connected between terminals of the first power supply and the second power supply.

Allowable Subject Matter

4. Claims 48 and 49 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 44-47, 50-53 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

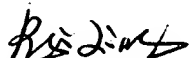
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

12/11/07